Exhibit 300: Capital Asset Summary

Part I: Summary Information And Justification (All Capital Assets)

Section A: Overview & Summary Information

Date Investment First Submitted: 2009-06-30
Date of Last Change to Activities: 2012-08-23
Investment Auto Submission Date: 2012-02-27
Date of Last Investment Detail Update: 2012-02-27
Date of Last Exhibit 300A Update: 2012-08-23
Date of Last Revision: 2012-08-23

Agency: 021 - Department of Transportation **Bureau:** 12 - Federal Aviation Administration

Investment Part Code: 01

Investment Category: 00 - Agency Investments

1. Name of this Investment: FAAXX603: Traffic Mgmt Advisor-Single Cntr (TMA)

2. Unique Investment Identifier (UII): 021-613828465

Section B: Investment Detail

1. **Provide a brief summary of the investment, including a brief description of the related benefit to the mission delivery and management support areas, and the primary beneficiary(ies) of the investment. Include an explanation of any dependencies between this investment and other investments.**

The Traffic Management Advisor (TMA) system is an information technology tool that enables the FAA to land more aircraft at designated airports in a given amount of time. Prior to deploying TMA, air traffic controllers (ATC) used manual procedures to safely separate aircraft arriving at airports. This process often leaves gaps in the arrival streams. The TMA system processes flight data, radar data, and weather data to produce efficient airport arrival sequences that enable us to fill those gaps with additional aircraft. TMA provides data to ATC that enables them to give appropriate direction to pilots. The Time Based Flow Management (TBFM) Program is the continuation and support of Traffic Manager Advisor (TMA) which is at the end of its lifecycle. The TBFM program is composed of two (2) primary components: (1) re-architecting the current TMA platform to maintain current services while reducing logistical footprint, and (2) designing, developing, testing and implementing new functionalities. Dependencies with other programs are: Traffic Flow Management (TFM), System Wide Information Management (SWIM), FAA Telecommunications Infrastructure (FTI), En Route Automation Modernization (ERAM), ERAM DPos & Enhancements, Automatic Dependent Surveillance-Broadcast (ADS-B), and NextGen Network Enabled Weather (NNEW).

2. **How does this investment close in part or in whole any identified performance gap in**

support of the mission delivery and management support areas? Include an assessment of the program impact if this investment isn't fully funded.

All TMA efforts focus on closing the performance gaps identified in the "Traffic Flow Management (TFM) Mission Need Statement (MNS), Revalidated," MNS-307, dated March 31, 2003. TBFM Solution Development and Implementation phase will run from FY10 to FY14. TBFM is a key automation platform for NextGen enhancements. TBFM supports NextGen Operational Improvement (OI) 104123; Time Based Metering using Area Navigation (RNAV)/Required Navigation Performance (RNP). Infrastructure supports NextGen OI 104120; Point in Space Metering. TBFM builds upon the demonstrated success of TMA in using time based metering as well as other recently available technologies to increase arrival throughput and decrease costs and delays. TBFM will expand time based metering capability to further sites, reduce delays due to current flight scheduling constraints, and automate the coordination and management of departures over shared and congested National Airspace System (NAS) resources (fixes, airways). TBFM will allow more fluid flights with fewer speed changes and reduced miles and time to improve performance for both the FAA and the aircraft industry and flying public. In FY12, TBFM deployments will reduce airborne delays for metered flights during high demand periods (demand greater than 70% of capacity) by 2%. Lack of funding for TMA-TBFM will prevent the implementation of time based metering capabilities at additional sites and the implementation of a key automation platform for NextGen.

3. **Provide a list of this investment's accomplishments in the prior year (PY), including projects or useful components/project segments completed, new functionality added, or operational efficiency achieved.**

In FY2011, TBFM designed and developed software fix to remove artificial schedule constraint from the legacy software. This constraint has historically resulted in delaying some flights that could have been reasonably accommodated in the traffic flow. TBFM also successfully transitioned operations support and sustainment from incumbent contractor to winning offeror (FY2010 competitive procurement). TBFM will also close the Training Gap identified during Mission Analysis and Operational Effectiveness Analysis. Standardized procedures were approved by NATCA on 14 July 2011 and will serve as the basis for standardized system-wide training. Additionally, TBFM release 3.12 was rolled out with standardized release-specific training in July 2011.

4. **Provide a list of planned accomplishments for current year (CY) and budget year (BY).**

In FY 2012, TBFM will • Complete development and testing of re-architected systems to replace current (end of life) hardware and reduce the logistical footprint at the facilities. • Compete testing and deploy flexible scheduling functionality. Flexible Scheduling functionality will create a more optimal schedule by removing artificial flight slot constraints introduced by the current flight scheduling tool. • Complete development, testing and deployment of improved wind data functionality to improve trajectory calculations leading to improved Estimated Time of Arrivals (ETAs). • Design and start development of information sharing functionality that will leverage the System Wide Information Management (SWIM) Service Oriented Architecture (SOA) infrastructure and standards to distribute TBFM information (i.e. aircraft arrival and departure STAs) to NAS systems and users while also receiving flight data via this service. • Initiate design of Integrated Departure Arrival Capability. IDAC will help

reduce the scheduling competition between arrivals and departures by increasing the manageability of arrivals from the viewpoint of also creating departure slots in the traffic flow. In FY 2013, TBFM will • Initiate and complete the implementation waterfall of the re-architected system. • Complete development, testing and deployment of information sharing functionality that will leverage the System Wide Information Management (SWIM) Service Oriented Architecture (SOA) infrastructure and standards to distribute TBFM information (i.e. aircraft arrival and departure STAs) to NAS systems and users while also receiving flight data via this service. • Complete design and initiate development of Integrated Departure Arrival Capability. IDAC will help reduce the scheduling competition between arrivals and departures by increasing the manageability of arrivals from the viewpoint of creating departure slots in the traffic flow. • Initiate design of Convective Weather Display. Convective Weather Display will increase air traffic awareness of weather patterns and short term (0-2 hours) specific forecasted projections to aid in decision making.

5. **Provide the date of the Charter establishing the required Integrated Program Team (IPT) for this investment. An IPT must always include, but is not limited to: a qualified fully-dedicated IT program manager, a contract specialist, an information technology specialist, a security specialist and a business process owner before OMB will approve this program investment budget. IT Program Manager, Business Process Owner and Contract Specialist must be Government Employees.**

2010-04-06

Section C: Summary of Funding (Budget Authority for Capital Assets)

1.

Table I.C.1 Summary of Funding

	PY-1 & Prior	PY 2011	CY 2012	BY 2013
Planning Costs:	$13.9	$0.0	$0.0	$0.0
DME (Excluding Planning) Costs:	$395.1	$20.0	$38.7	$12.9
DME (Including Planning) Govt. FTEs:	$13.0	$1.6	$1.5	$1.6
Sub-Total DME (Including Govt. FTE):	$422.0	$21.6	$40.2	$14.5
O & M Costs:	$71.5	$14.4	$14.9	$18.2
O & M Govt. FTEs:	$10.7	$0.7	$0.7	$0.8
Sub-Total O & M Costs (Including Govt. FTE):	$82.2	$15.1	$15.6	$19.0
Total Cost (Including Govt. FTE):	$504.2	$36.7	$55.8	$33.5
Total Govt. FTE costs:	$23.7	$2.3	$2.2	$2.4
# of FTE rep by costs:	217	15	14	15
Total change from prior year final President's Budget ($)		$0.0	$0.0	
Total change from prior year final President's Budget (%)		0.00%	0.00%	

2. If the funding levels have changed from the FY 2012 President's Budget request for PY or CY, briefly explain those changes:

Section D: Acquisition/Contract Strategy (All Capital Assets)

Table I.D.1 Contracts and Acquisition Strategy

Contract Type	EVM Required	Contracting Agency ID	Procurement Instrument Identifier (PIID)	Indefinite Delivery Vehicle (IDV) Reference ID	IDV Agency ID	Solicitation ID	Ultimate Contract Value ($M)	Type	PBSA ?	Effective Date	Actual or Expected End Date
Awarded	6920	DTFAWA-10-C-00052									
Awarded	6920	DTFAWA-03-C-00071									
Awarded	6920	DTFAWA-10-C-00117									
Awarded	6920	DTFAWA-11-C-00017									

2. If earned value is not required or will not be a contract requirement for any of the contracts or task orders above, explain why:
TMA is steady state and does not require EVM Reporting. TBFM conducts total program EVM (including prime and all support contractors and FTEs) using formal EVM data where mandated by contract and informal data sources (monthly invoices and personnel records) for all other information to assure that the total EVM shows the true program status. TBFM is being modeled after an independently-assessed ANSI/EIA 748A compliant EVMS system, specifically the TFM-M program. The EVM process, as implemented on TBFM, will be validated by an independent EVM review at a later date. All prime contractor activities are monitored and managed on a monthly basis regardless of contract arrangement. All activities are formally reported and assessed during the Program Monthly Review (PMR). All activities use CPR reports to proactively manage the cost and schedule performance; this includes efforts which are best acquired via T&M contract vehicles. All work performed using T&M arrangements is defined by Task Orders prior to the performance and includes: 1) a detailed description of the work/services to be performed; 2) a milestone/performance schedule and 3) all deliverables including quantities and delivery date(s). The useful segments in Part 2 Section C are risk-adjusted. Monthly contractor expenditures (invoices)and schedule updates (monthly status reviews) are used to ensure proper progress. These various contract types allow the government to provide an incentive to the contractor in critical cost intensive areas to meet project costs while meeting performance and schedule goals. The last 10 percent of the effort is for government support contractors. These are Level-of-Effort (LOE) contracts/tasks orders in support of the government activities required to complete the program. These support activities are LOE to allow for the greatest contract flexibility in adjusting contractor support skill types, for the least cost, as the TBFM program evolves from development to implementation to maintenance. The support and prime contractors' activities are linked together via both the Program Integrated Schedule and Monthly Program Level EVM to monitor cost, schedule and scope risk.

Exhibit 300B: Performance Measurement Report

Section A: General Information

Date of Last Change to Activities: 2012-08-23

Section B: Project Execution Data

Table II.B.1 Projects

Project ID	Project Name	Project Description	Project Start Date	Project Completion Date	Project Lifecycle Cost ($M)
1	Re-architecture -Design thru Deploy to First Site	Design, Develop and Test Re-architected system.			
2	Re-architecture - Deploy to 50% of Sites	Deploy Re-architected System to first half of Waterfall Schedule.			
3	Re-architecture - Deploy Remaining 50% Sites	Deploy Re-architected System to second half of Waterfall Schedule.			
6	Fall 2011 Release, Develop thru Development, Test and Evaluate (DT&E)	Design and Develop Fall 2011 Software Release.			
7	Fall 2011 Release, Test and Implement	Test and Implement Fall 2011 Software Release.			
8	Fall 2011 Release -Logistics Pipeline including Training and Tech Manuals	Design and Develop Training, Technical Manuals for Fall 2011 Software Release.			
9	Spring 2012 Release, Develop thru Develop, Test and Evaluate (DT&E)	Design and Develop Spring 2012 Software Release.			
10	Spring 2012 Release, Test and Implement	Test and Implement Spring 2012 Software Release.			
12	Spring 2013 Release, Develop thru Develop, Test and Evaluate	Design and Develop Spring 2013 Software Release.			

Table II.B.1 Projects

Project ID	Project Name	Project Description	Project Start Date	Project Completion Date	Project Lifecycle Cost ($M)
	(DT&E)				
15	Fall 2013 Release, Develop thru Develop, Test and Evaluate (DT&E)	Design and Develop Fall 2013 Software Release.			
18	Spring 2014 Release, Develop thru Develop, Test and Evaluate (DT&E)	Design and Develop Spring 2014 Software Release.			
21	Fall 2014 Release, Develop thru Develop, Test and Evaluate (DT&E)	Design and Develop Fall 2014 Software Release.			

Activity Summary

Roll-up of Information Provided in Lowest Level Child Activities

Project ID	Name	Total Cost of Project Activities ($M)	End Point Schedule Variance (in days)	End Point Schedule Variance (%)	Cost Variance ($M)	Cost Variance (%)	Total Planned Cost ($M)	Count of Activities
1	Re-architecture -Design thru Deploy to First Site							
2	Re-architecture - Deploy to 50% of Sites							
3	Re-architecture - Deploy Remaining 50% Sites							
6	Fall 2011 Release, Develop thru Development, Test and Evaluate (DT&E)							
7	Fall 2011 Release, Test and Implement							
8	Fall 2011 Release -Logistics Pipeline including Training and Tech Manuals							
9	Spring 2012 Release,							

Activity Summary

Roll-up of Information Provided in Lowest Level Child Activities

Project ID	Name	Total Cost of Project Activities ($M)	End Point Schedule Variance (in days)	End Point Schedule Variance (%)	Cost Variance ($M)	Cost Variance (%)	Total Planned Cost ($M)	Count of Activities
	Develop thru Develop, Test and Evaluate (DT&E)							
10	Spring 2012 Release, Test and Implement							
12	Spring 2013 Release, Develop thru Develop, Test and Evaluate (DT&E)							
15	Fall 2013 Release, Develop thru Develop, Test and Evaluate (DT&E)							
18	Spring 2014 Release, Develop thru Develop, Test and Evaluate (DT&E)							
21	Fall 2014 Release, Develop thru Develop, Test and Evaluate (DT&E)							

Key Deliverables

Project Name	Activity Name	Description	Planned Completion Date	Projected Completion Date	Actual Completion Date	Duration (in days)	Schedule Variance (in days)	Schedule Variance (%)
6	Fall 2011 Release, Develop thru Development, Test and Evaluate (DT&E)	Develop the software for the Fall 2011 Software Release.	2011-07-30	2011-07-30	2011-07-30	136	0	0.00%
7	Fall 2011 Release - Independent Test Plans, Procedures, Conduct (APB Milestone - Begin TBFM functionality deployment)	Prepare Key Site Acceptance Test (KSAT) Plans and Procedures. Conduct System Acceptance Test (SAT) and KSAT for the Fall 2011	2011-11-30	2011-11-30	2011-11-30	124	0	0.00%

Key Deliverables								
Project Name	Activity Name	Description	Planned Completion Date	Projected Completion Date	Actual Completion Date	Duration (in days)	Schedule Variance (in days)	Schedule Variance (%)
		Software Release. (APB Milestone - Fall 2011 Release IOC completed)						
8	Training and Tech Manuals, Incorporate and Distribute	Incorporate and Distribute Training and Technical Manuals for the Fall 2011 Software Release.	2012-04-18	2012-02-29	2012-02-29	183	49	26.78%
10	Spring 2012 Release - Test Conduct	Conduct testing of the Spring 2012 Software Release.	2012-07-20	2012-07-20		165	-42	-25.45%
1	Re-Architecture - Procure Remaining Sites Hardware	Procure Re-architected system components for remaining sites.	2012-10-24	2012-10-24		183	0	0.00%

Section C: Operational Data

Table II.C.1 Performance Metrics

Metric Description	Unit of Measure	FEA Performance Measurement Category Mapping	Measurement Condition	Baseline	Target for PY	Actual for PY	Target for CY	Reporting Frequency
Increase peak airport capacity rate (arrival rate per hour)	Percentage	Technology - Effectiveness	Over target	3.000000	3.000000	2.760000	3.000000	Semi-Annual
TMA equipped En Route Centers where time based metering is used to manage at least one peak demand period a day when airport demand exceeds capacity	Percentage	Technology - Efficiency	Over target	100.000000	100.000000	100.000000	100.000000	Semi-Annual
Meet or exceed baseline availability	Percentage	Technology - Reliability and Availability	Over target	99.000000	99.000000	99.000000	99.000000	Monthly
Centers Using Standardized Training and Procedures	Percentage	Customer Results - Service Quality	Over target	0.000000	70.000000	0.000000	100.000000	Semi-Annual
Cost Savings - Airline Direct Operating Costs (ADOC) and Passenger Value of Time (PVT) due to Dynamic Planner Improvement	Dollars	Customer Results - Customer Benefit	Over target	0.000000	0.000000	0.000000	3.390000	Semi-Annual